

## Abstract of the Disclosure

The present invention is directed to an apparatus and method for a measurement system for the testing of transducers, and more particularly to the testing of piezoelectric transducers. The measurement system includes a transducer, a feedback amplifier coupled to the transducer and a signal processing circuit coupled to the output of the amplifier. The method of testing the transducer includes coupling the test signal to the transducer, disabling the amplifier, and measuring the response of the transducer to the test signal with the test processing circuit. The circuit itself used for performing this method includes a piezoelectric transducer, an amplifier, including a feed-back circuit coupled to the amplifier for amplifying the output of the transducer, a power source coupled to the amplifier, a signal source generating a test signal having a frequency spectrum at least overlapping the self resonant frequency of the transducer coupled to the transducer, and a switch coupled to the amplifier capable of disabling the amplifier.